U.S. Air Force Safety Strategic Plan
Ground Safety Appendix

Safety Vision 2010

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Compliance Through Operational Risk Management

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Purpose

Moving Ground Safety into the 21st Century will require a major paradigm shift in the way safety will support the Air Force mission. With a climate of dwindling resources, downsizing, and increasing operations tempo we will need to better leverage resources to enhance and sustain readiness. This Appendix to the Air Force Safety Strategic Plan will play an important role in ensuring key goals and objectives of that plan move toward success.

Moreover, this Appendix is an implementation plan for AFPD 90-8, Environmental, Safety and Occupational Health. The Appendix is a guide to the Air Force Ground Safety community to establish a new direction and quantify and establish resource requirements. It defines Air Force Ground Safety's goals and objectives and provides benchmarks for evaluating Air Force Ground Safety performance. The plan enables all levels of command to plan, target mishap prevention efforts, and leverage resources.

Air Force safety activities are organized to preserve resources and enhance warfighting capabilities through a systematic and progressive process of hazard identification and mitigation through the Operational Risk Management process. As we move toward the 21st Century, safety activities will require a greater transition from reactive (inspections & mishap investigations) to proactive (identification & management of risk). These activities will support commanders by early identification of safety problems that could degrade readiness or mission accomplishment. Additionally, AF Ground Safety must be fully aware of the cost of doing business, be able to clearly define that cost, and determine its effect on mishap prevention as it applies to the mission.

Each member of the Ground Safety team should be familiar with the contents of the Air Force Safety Strategic Plan and this Appendix, their individual responsibilities, and their organization's progress toward the goals and objectives.

Core Values

This Safety Strategic Plan Appendix is underpinned by the Air Force's Core Values.

Integrity First We must have assurance that we view mishaps, causes, and solutions objectively. We must do the "right thing, the right way"—even when no one else is looking. We must hold people accountable for their decisions and actions—and provide appropriate recognition for success.

Service Before Self The long-term good of the United States and the U.S. Air Force often requires personal sacrifice to protect our war-fighting capability.

Excellence in All We Do Although our resources are limited, we must ensure that our critical tasks are accomplished in a quality manner—on time.

Mission

Resource Preservation

The essence of this mission is the preservation of resources—lives and systems/equipment—through elimination of mishaps. With the support of a cohesive Air Force Ground Safety Program, commanders can institute operational risk management allowing them to accomplish their mission while adhering to the key elements of AFPD 90-8--leveraging resources, sustaining readiness, and being a good neighbor. Except for requirements levied by public law or imposed by higher headquarters, commanders must balance acceptable levels of risk and benefits, and take actions to control those unnecessary risks.

Vision

AF GROUND SAFETY...innovators supporting mission accomplishment, and optimizing operational effectiveness by preserving resources in the workplace and community environments.

Air Force Ground Safety is striving for the elimination of property damage losses and workplace and off-duty injuries and deaths. Workplace environments must be characterized by a genuine, shared commitment to workplace safety by supervisors and workers, with the necessary training, resources, and support systems devoted to effective risk management. This venture must be a joint effort across all functional communities. Active leadership commitment and personal responsibility are critical.

To accomplish this vision, Air Force Ground Safety will be results-oriented using data proactively to enhance the safety of all personnel. Safety professionals must apply a comprehensive strategy that combines common sense instructions; and transition from a purely compliance-based approach to one of encouraging compliance through proper use of Operational Risk Management procedures. Individuals must be encouraged to work and play safely, even if a safety professional or supervisor is not in the area, because it is the right thing to do and the risks are too high if they don't.

Air Force Ground Safety's strategic mishap prevention commitment highlights support for the SECAF-CSAF ESOH principles of sustaining readiness, being a good neighbor (conscientious stewards of the environmental and public trust), and leveraging resources to maximum advantage.

Operating Environment

The execution of the Air Force Ground Safety Program has resulted in substantial progress in lowering the work-related fatality rate. The challenge of making satisfactory progress toward the accomplishment of the Air Force Ground Safety Mission is being affected by a number of factors. These impacting factors are:

- Changes in overarching federal guidance
- Reductions in manpower and funding
- Increase in operations and personnel tempo
- Dynamic change in the workplace environment resulting in rapid technological advances and changes in the nature of work, leading to new, sometimes unforeseen safety issues, requiring increased time and attention
- Need for a more focused, high-speed data collection process to enhance our ability to collect and evaluate risk factors and their impact on mission accomplishment. This will require substantial investment in data systems, as there are many sources of data to measure ground safety's performance in supporting the mission and sustaining readiness
- Need for increased partnering with environmental, occupational health, bioenvironmental engineering and fire protection experts

With these existing and anticipated future challenges, Air Force Ground Safety will need to focus efforts to develop and implement methods of leveraging its capabilities to achieve the greatest possible impact on personnel safety and successful mission accomplishment.

Key Customers

Although we have responsibilities to many customers in the United States and abroad, special emphasis is placed on knowing and supporting the needs of certain groups and organizations:

- American Public
- Other Services
- Secretariat
- Air Staff
- Commanders
- Supervisors & Workers
- Safety Team (SEF, SEW, etc.)
- ESOH Partners

Stakeholders

Although we receive oversight, guidance, and information from many suppliers in the United States and abroad, we work most closely with the following organizations:

- National Transportation Highway Safety Administration (NTHSA)
- Regulators (OSHA, EPA, DoT)
- National Safety Council (NSC)
- Other DoD Organizations
- System Program Offices
- Science & Technology Partners
- Safety Education and Training Providers

Benchmarking

Although competitive comparison will permit us to see "how we're doing" against similar organizations (such as the Services, Aviation Industry, Transportation Industry), we need to look "outside the box" if we are to observe and adapt "world class" ideas and processes. Here are but a few examples:

AREA	POSSIBLE BENCHMARK CANDIDATES
◆ Compliance Requirements	Occupational Safety and Health Administration, Aviation Industry, Private Sector, Other Services, Transportation Industry
◆ Traffic Safety	National Safety Council, Insurance Companies, DoT
◆ Risk Management	PRIMA (Public Risk Management Association), American Society of Safety Engineers, Other Services, Private Industry

Key Products & Services

Air Force Ground Safety personnel must provide effective consultation, policy, tools, plans, programs, procedures, and/or guidance in the following areas:

- Safety/Mishap Prevention Expertise
- Safety Education and Training (Return on Investment)
- Evaluating Cost and Effect
- Data Collection and Trend Analysis
- Hazard Identification and Risk Assessments
- Mishap Investigation and Reports
- Operational Risk Management
- Safety Planning for Contingencies & Exercise Support
- Design Reviews
- Safety Rules and Reviews
- Crosstell
- Unit and Individual Recognition
- Safety Lessons Learned from Contingencies, Exercises, and Mishaps

Key Result Areas

These are the specific areas AF Ground Safety organizations must be successful in to meet the needs of commanders and their personnel.

- Operational Risk Management Deployment
- Trend Analysis
- Data Collection and Analysis
- Hazard Identification and Risk Assessment
- Human Factors
- Cost and Effect of Safety Programs
- Safety Lessons Learned for Contingencies, Exercises and Mishaps
- Risk Assessments and Recommended Courses of Action
- Preservation of AF Resources

Air Force Ground Safety Goals

To achieve the Vision, Air Force Ground Safety has established three interdependent and complementary strategic goals to guide the development of programs and activities and move Air Force Ground Safety into the next century. The successful accomplishment of any one of the strategic goals will be difficult without parallel successes in the other goals. For example, a focus on reducing hazards, exposures, and injuries and deaths will be difficult to achieve without realizing the goal which calls for engagement of workers, supervisors and leaders in this effort through the use of Operational Risk Management. Nor will the other goals be attained without ensuring that Air Force Ground Safety develops strong leader confidence and support for its activities.

Air Force Ground Safety's success in meeting the goals and objectives outlined in this Strategic Plan Appendix will be measured by aggregating results from multiple program areas. This will help ensure that partners within the risk management arena work together to leverage resources and sustain mission readiness, as well as break down organizational barriers and engage the whole risk management team in ensuring mission accomplishment. This Appendix is designed to integrate various program activities, so that there is a unified purpose and direction for all of the programmatic elements within the Air Force. The strategic goals for Ground Safety are:

1. **Support successful mission accomplishment by improving personnel safety on - and off-duty as evidenced by fewer hazards, managed risks, and reduced mishaps.**

2. **Promote a workplace culture with increased supervisor and worker awareness of, commitment to, and involvement in resource preservation and ORM to better support and sustain the mission.**

3. **Secure senior leadership and public confidence through excellence in the development and delivery of programs and services.**

Goal 1: Support successful mission accomplishment by improving personnel safety on - and off-duty as evidenced by fewer hazards, managed risks, and reduced mishaps.

Air Force Ground Safety's primary mission is to support the AF mission by assuring a safe workplace for workers and encouraging risk mitigation off-duty. Achieving this goal will require Ground Safety to engage the Environmental, Fire Protection, Safety and Health communities in identifying and addressing significant workplace hazards to ensure successful mission accomplishment.

Inspection Process and Operational Risk Management

Objective: Change the inspection process from a strictly compliance-oriented program to one of encouraging compliance through the proper use of operational risk management on - and off-duty.

Initiative 1: Redefine the scope of existing inspection processes, moving from one that primarily emphasizes facility compliance to one that balances activity, operations, and facility concerns.

Process/Activities:

- Decrease the emphasis on annual facility inspections and increase the emphasis on risk assessment based "activities, operations and facilities" through increased, focused, spot inspection activities.
- Develop a standardized up-to-date reference protocol using both OSHA and AFOSH to focus on activities, operations, and facilities.
  - Define education and training requirements
  - Identify data and trending requirements
  - Automate the process
  - Protocol (update) maintenance
- Explore additional partnering opportunities with our ESOH counterparts.

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Goal 1: Support successful mission accomplishment by improving personnel safety on - and off-duty as evidenced by fewer hazards, managed risks, and reduced mishaps.

Inspection Process and Operational Risk Management

(continued)

Initiative 2: Actively address motor vehicle safety by adopting proactive programs focused on reducing PMV-4 and PMV-2 mishaps.

Process/Activities:

- Intensify training
- Be more creative with seasonal campaigns
- Explore the latest behavioral approaches to mishap reductions

Goal 2: Promote a workplace culture with increased supervisor and worker awareness of, commitment to, and involvement in resource preservation and ORM to better support and sustain the mission.

The key to ensuring safe workplaces is to develop strategies for encouraging leaders and workers to develop a workplace culture where everyone is aware of, committed to, and involved in ensuring work is done in a safe manner.

Moving Safety to a Risk Management Approach

Objective: Move Air Force Safety from a strictly compliance-based approach to one of encouraging and supporting compliance through proper use of operational risk management procedures. Support integration of this approach into Air Force culture.

Air Force Safety activities are organized to protect the resources and enhance warfighting capabilities through a systematic and progressive process of hazard identification and risk control. These activities support commanders by early identification of hazards and risks that could degrade readiness or mission accomplishment. When hazards and risks are identified and actions to control or mitigate them are initiated and implemented through command channels; then a risk-based approach has proactively occurred.

The Air Force Safety Program provides a source of technical support to assist commanders in the management of risk to achieve their goals. We must define expectations regarding safety, resource preservation, and ORM as it applies to AF operations. The process must include steps to clarify accountability, continuously improve performance, and, in total, ensure that the processes are sustainable. These steps are:

Initiative 1:

- Air Force Ground Safety will encourage, explore and expand ways to protect the workforce; including support of:
  - Integration of a standard risk-based safety philosophy into all formal schools and training.
  - Institutionalizing ORM concepts into all Air Force operations.

continued

Goal 2: Promote a workplace culture with increased supervisor and worker awareness of, commitment to, and involvement in resource preservation and ORM to better support and sustain the mission.

Moving Safety to a Risk Management Approach

Initiative 1: *(continued)*

- Inclusion of safety responsibilities in functional instructions, directives, doctrine and requirements.
- Emphasizing the individual's role and responsibility in mishap prevention.
- Exploring the feasibility of and adaptability of Behavioral Based Safety within the AF.

Initiative 2:

- Develop a formal Ground Safety Lessons Learned Program that will support the AF mission. The goal is to maximize the benefits gained through exercises to sustain readiness, boost combat capability, streamline procedures, and improve system support.
- Develop procedures for tracking and distribution of safety lessons learned during military exercises for distribution to the AF Safety community and involved organizations.
- Define costs associated with the deployment of this program.
- Explore automating the system for lessons learned. Consider:
  - Planning, executing, and evaluating AF safety exercise participation.
  - Selecting safety objectives and analyzing exercise results.
  - Developing a format for safety after-action reporting to address safety up-channel and down-channel requirements and lessons learned.
  - Identifying problems affecting mishap prevention, and assigning responsibility for corrective action.
- Develop reporting instructions to capture lessons learned information from all safety personnel returning from exercises and contingencies. Imbed this requirement in the appropriate AFI.

Goal 3: Secure senior leadership and public confidence through excellence in the development and delivery of programs and services.

Over the next 10 years, Ground Safety will seek to strengthen its reputation as a leader in occupational safety and health by identifying and addressing the significant causes of workplace injuries and deaths. Through the effective delivery of its programs and services, Ground Safety will demonstrate that it has a positive impact on occupational safety and health and has increased commander confidence that Ground Safety is effectively carrying out its mandate and is key to successful mission accomplishment.

Data Automation

Objective: Develop database "link" programs which maintain data on ground safety processes, i.e., inspections criteria/findings, inspection result trends, and hazard abatement to include trends and projections to determine mishap probability. Refine and improve Air Force capability to identify and analyze the most frequent, most costly, most severe, and most preventable mishaps on and off duty. Identify a means for mishap prevention measures and targeting resources.

Initiative 1:

- Develop an automated system which will be a linking program for the Safety Automated System (SAS) to include standardized input data sheets, trend reports, etc. Consider:
  - Link to inspection data for real time input/retrieving.
  - Establish AF Ground Safety Metrics
  - Link to Risk Management Information Systems (RMIS).
  - Link to other existing pertinent data systems, i.e., Civilian Personnel and Surgeon General
  - Explore opportunities to partner with ESOH counterparts in the development of an ESOH management system.
- Develop data points for measurement/trending inspection and mishap data.
- Determine data automation training needs/requirements and develop a training path, if needed.

continued

Data Automation

Initiative 1: *(continued)*

- Define hardware/software requirements for operation/maintenance of these programs.
- Define Safety's automated requirements.
- Define resource requirements for the Planning, Programming, and Budgeting System.

Initiative 2:

- Develop an annual analytical summary of Air Force inspection trends, lessons learned, and mishaps to include injuries and fatalities.
- Provide suggestions for targeting mishap prevention efforts.
- Develop forecasting models for mishap prevention efforts.
- Periodically release information via web site and messages.

Initiative 3:

- Explore developing an automated system, to forecast mishap probability profiles in real time for trending and targeting mishaps.
- Establish a link to the Safety Automated System (SAS).
- Focus on human factors, equipment, working environment, operations, etc.
- Define resource requirements for the Planning, Programming, and Budgeting System.

Initiative 4:

- Assess and redefine the Hazard Abatement process.
    - Safety and its EOH partners assess the current USAF Hazard Abatement Program.
    - Establish a survey to assess and validate the current program for commanders, functional managers, supervisors, and safety professionals.
    - Redefine the Hazard Abatement Program as required based on the findings of the survey.
    - Explore the feasibility of defining possible funding options for hazard abatement with ESOH partners similar to CE's Environmental Restoration Program.

Expand the Concept of Force Protection to Include Safety

Objective: Strengthen the concept of Force Protection to include and imbed Safety in Air Force doctrine. Ensure Air Force facilities are safe places for people to work and live.

Initiative:

- Support expanding the Air Force definition of Force Protection to include protection against non-combatant injury and fratricide. Focus should center on maintaining a safe and sustainable force. Consider the definition used by the U.S. Army.
  - Force Protection entails more than solely addressing threats from hostile forces.
  - Explore the feasibility of formalizing a coordinated Force Protection concept, with ESOH partners, for inclusion in Air Force Protection doctrine.
- Partner with SG, IL (LG/CE), SC, OI, XP, XOF (SF) to explore feasibility of development of a Force Protection cell to support the EAF commander.

Reengineering of Safety

Objectives: Support the AF Safety reengineering effort to address safety's support of the Air Force mission in the 21st century.

Many principles of reengineering used in the private sector are applicable in today's Air Force. To meet its future mission challenges AF Safety must reengineer the way it does business. With current downsizing and increases in OPS TEMPO around the world, the need to reengineer the way Ground Safety does business and protects vital resources becomes increasingly important. Effective management of environment, safety, and occupational health risks and costs is essential for mission success. Ground Safety must reengineer to conduct and sustain operations while preserving resources and enhancing the AF mission. The three ESOH principles must guide safety's

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efforts: “sustain readiness,” “leverage resources,” and “be a good neighbor.” Incorporating Operational Risk Management into the Air Force culture is one effort that produces significant results and must be integrated and sustained for successful mission accomplishment.

Initiatives:

- Actively participate in the AF Safety Reengineering effort to:
  - Define a mission clearly and in terms of compelling problems/ solutions.
  - Define challenging but achievable outcomes against which to measure performance.
  - Collaborate with other government agencies wherever possible.
  - Build partnerships with ESOH, private and nonprofit sectors.
  - Respect the talents of “front-line workers.”
  - Identify clearly the citizens and groups who are entitled to our services and focus attention as sharply as possible on their needs.
  - Tasks involve regulation--consider working with the regulated parties to meet common objectives through compliance, rather than depending entirely on traditional enforcement.
  - Consider how safety will market its services in supporting and sustaining readiness through AEF, military exercises, and contingencies.
  - Use information technology to improve services to the AF leadership in supporting and sustaining readiness, and leveraging of resources.

Education and Training for Military and Civilian Safety Personnel

Objective: Develop a process to support specialized education and training requirements to include identification, forecasting, data automation and acquisition to support the Air Force mission in the next century (relating to insuring a safe work environment). Improved, more focused training and education will help to move safety personnel from a strictly compliance-based approach to a more risk-based approach. Force Protection--which includes Safety as a key component--is the cornerstone of our efforts in the next century.

Initiative:

- Refine education and training requirements for the 21st century.
- Establish a web-based database program to consist of an historical file of all of the personnel in the safety career field and what courses they have taken.
- Determine a body of courses required to support Air Force policies, plans and programs which drive the knowledge, skills and abilities needed for execution.
- Refine the plan for meeting training objectives.
- Encourage in-house training to fully utilize corporate knowledge and lessons learned.
- Develop a professional reading program to enhance and broaden the background of our safety specialists/craftsmen and managers. Readings should encompass both technical and managerial topics.
- Explore the feasibility of VTC and commercial training for safety personnel.
- Determine cost requirements and prioritization to meet this objective.
    - Coordinate requirements with utilization and training workshop and training and development panel.
- Expand career broadening opportunities within the AF.

Ground Safety: Planning, Programming and Budgeting System (PPBS)

Objective: Define resource requirements at all levels of command for ground safety for timely incorporation into the PPBS.

Safety must be involved in the Planning, Programming and Budgeting System process or in addressing costing, budgeting, and funding of safety technology solution in mishap prevention processes.

Initiative:

- Forecast budget requirements to support safety plans and requirements into the 21st century.
  - Education and training.
  - Data Automation requirements (hardware/software).
  - Special emphasis programs (R&D, new programs, etc.).
  - Specialized equipment.

Ground Safety in Operational Risk Management

Objective: Determine Air Force Ground Safety's role in the ORM process

Initiative:

- Support efforts to ensure that operational risk management concepts are integrated in ground safety managed education and training efforts.
  - Training packages and material produced by HQ AFSC and MAJCOM/FOA/DRU.
- Define ORM education requirements for the 1SOX1 AFSC (entry, 3 level, 5 level CDCs, 7 level and the CFETP) and GS-018 career field.
  - Requirements presented to UT&W as to what the appropriate training requirements will be for all 1SOX1 formal training.
  - All Occupational Safety personnel receive the 4 day ORM course or equivalent training (short term).
- Explore feasibility of an automated risk management model for industrial safety operations and off duty activities. (e.g., DOE risk management program, 101st ARW JSA/PPE program, etc.).

Development of Ground Safety Metrics

Objectives: Establish metrics that measure Air Force ground safety performance.

Currently, there are no true proactive metrics to measure safety performance real time at all levels of command (Air Staff, MAJCOM, Unit levels). *We can not manage what we do not measure.* This is an area requiring a large effort to focus on what requirements and processes need to be measured. Proactive metrics will allow our leadership to target mishap prevention efforts and resources to support the Air Force mission in the 21st century.

Measure, Assess and Audit Progress--Measuring our progress is critical to improving safety performance. Safety must establish a best practice program through unit and peer assessments. These are evaluations of critical processes and activities by trained co-workers to judge whether the requirements of the safety processes are being met. An alternative is to have each process owner assess his/her own progress (self-assessment). Whether peer assessment or self-assessment is chosen, this step includes verification that a system is in place and is working effectively for each expectation.

Initiative:

- To review existing HQ USAF and AF/SE metrics to determine application to the ground safety arena.
- Consider feasibility of adding additional metrics which measure safety performance and identify problem areas at Air Force, MAJCOM, Unit level and help target resources.
- Ensure that whatever product is developed, it works/links with the SAS program.
    - Metrics need to be related/linked to cost and performance.
    - Metrics need to show sustaining readiness.
    - Help define problem areas to target resources.
- Metrics could include:
    - Reduce the 10 most prevalent types of workplace injuries by 10% a year by focusing on those job skills that cause the most injuries/illnesses and pose the greatest risk to workers and the AF mission.
    - Reduce off-duty fatalities by 10% a year through focused prevention efforts, such as an improved data analysis program, stronger leadership involvement, effective use of Operational Risk Management, revitalized lessons learned program, seasonal campaigns, and more effective crosstell.